



(12) **United States Patent**  
**Horstemeyer**

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(54) **SECURE NOTIFICATION MESSAGING SYSTEMS AND METHODS USING AUTHENTICATION INDICIA**

(58) **Field of Classification Search** ..... 340/994,  
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See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

3,568.161 A 3/1971 Knickel ..... 340/994

(Continued)

FOREIGN PATENT DOCUMENTS

EP                    0219859 A2           4/1987

(Continued)

## OTHER PUBLICATIONS

"Paving the Way for GPS in Vehicle Tracking", Showcase World, Dec. 1992.

(Continued)

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**G08G 1/123** (2006.01)

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(57) **ABSTRACT**

Systems and methods are disclosed for notification or messaging systems that give confidence to the notification-receiving party that a notification concerning the travel status of a mobile thing is from a proper authorized source. One representative method, among others, comprises the following steps: monitoring travel data associated with a mobile thing; communicating a notification involving a delivery or pickup task associated with the mobile thing to a personal communications device associated with a party; and providing authentication information to the personal communications device that indicates to the party that the notification is from an authorized source. A representative system, among others, comprises a computer system that is programmed to perform each of the foregoing steps.

**44 Claims, 50 Drawing Sheets**

